CALTRANS OFFICE OF EXAMINATIONS ASSOCIATE STEEL INSPECTOR – 6TRAC SUPPLEMENTAL APPLICATION QUESTIONNAIRE

The **ASSOCIATE STEEL INSPECTOR** examination is being given on a continuous **Open** basis.

This questionnaire is your entire examination and is designed to elicit a range of specific information regarding each candidate's knowledge, abilities, and experience to effectively perform the duties relative to the classification(s). Candidates are responsible for reading all of the material provided prior to completing this questionnaire. Responses will be evaluated using predetermined rating criteria. In order to obtain a position on the eligible list, a minimum rating of 70% must be attained. Please answer questions completely since incomplete responses and omitted information cannot be considered and/or assumed. Resumes, letters of reference, and other materials will not be evaluated or considered as responses to items in the Supplemental Application Questionnaire. (NOTE: Failure to meet the minimum qualifications and/or to complete this questionnaire accurately will result in elimination from this examination.) Candidates who fail to follow the instructions and/or who solicit input or assistance from others to complete this questionnaire will be eliminated from the examination.

IT IS IMPORTANT THAT YOU RETAIN A COPY OF THIS SUPPLEMENTAL APPLICATION QUESTIONNAIRE FOR YOUR RECORDS. Caltrans will <u>NOT</u> provide you a copy of your supplemental application questionnaire.

THIS AFFIRMATION MUST BE COMPLETED

I hereby certify and understand that the information provided by me (without assistance from others) on this Supplemental Application Questionnaire is true and complete to the best of my knowledge and contains no willful misrepresentation or falsifications. I understand this information may be verified. I also understand that if it is discovered that I have made any false representations, I will be removed from the examination process, removed from the list resulting from the examination, may not be allowed to compete in future examinations for State employment, and may be subject to prosecution for misdemeanor or felony offenses under California law. Additionally, State employees may have adverse action taken against them up to and including dismissal.

SIGNATURE:	 DATE:
NAME (PRINT):	
EXAMINATION TITLE:	

The completed Supplemental Application Questionnaire can be <u>mailed</u> and/or personally <u>hand</u> delivered to:

Caltrans File in person: Caltrans

Examination Services (MS 86) 1727 30th Street, 1st Floor P.O. Box 168036 Sacramento, CA 95816

Sacramento, CA 95816-8036 (916) 227- 7858

Facsimile (FAX) or electronically mailed (e-mailed) Supplemental Applications will not be accepted

Failure to submit your Supplemental Application Questionnaire will result in <u>elimination</u> from the examination.

Name:	Date:	
<u>PA</u>	RT I - EMPLOYMENT HISTORY	
INSPECTOR position. Begin with	work experience as it relates to the ASSOCIATE STEEL your most recent position. The <i>EXPERIENCE CODE</i> will I worked. You may include additional pages if necessary.	эе
	EXPERIENCE CODE A	
Company / State Agency:	Job Title:	
Employer Location: City:	State:	
Dates of Employment: From:	To:	
Supervisor:	Telephone Number:	
	EXPERIENCE CODE B	
Company / State Agency:	Job Title:	
Employer Location: City:	State:	
Dates of Employment: From:	To:	
Supervisor:	Telephone Number:	
	EXPERIENCE CODE C	
Company / State Agency:	Job Title:	
Employer Location: City:	State:	
Dates of Employment: From:	To:	
Supervisor:	Telephone Number:	
	EXPERIENCE CODE D	
Company / State Agency:	Job Title:	
Employer Location: City:	State:	
Dates of Employment: From:	To:	
Supervisor:	Telephone Number:	

PART II - WORK EXPERIENCE

INSTRUCTIONS

Step 1: In the *Experience Code* column, use the codes from <u>PART I</u> of this questionnaire to indicate where you performed the activity and/or acquired the task or knowledge. You may list more than one code per item, if applicable.

Step 2: For each item listed on page 4 in rows "1" through "10," place an "X" in the column that most accurately represents the <u>experience</u> you have <u>and</u> the <u>amount of time</u> your experience represents.

SAMPLE

		CO	DE EXP	ERIE	NCE	Al	MOI	JNT C	F TIM	E
		Experience Code(s)	I have had no training, or experience with this task.	I have had training, but no application on the job related to this task.	I have performed this task on the job under normal supervision.	I have performed this task independently.	I possess less than three (3) years of	I possess three (3) to four (4) years of experience.	I possess four (4) to five (5) years of experience.	I possess more than five (5) years of experience.
	(Sample Item)	A				V		V		
1.	Fabricating and erecting structural steel and manufacturing other related materials	& C				X		X		

PART II-WORK EXPERIENCE

	Code	Exp	perience)				Amou	nt of Ti	me
INSTR from Factivity application	an "X" in the column that most accurately represents the ence you have and the Amount of Time your experience	Experience Code(s) (FROM PART I)	I have had no training, or experience with this task.	I have had training, but no application on the job related to this task.	I have performed this task on the job under normal supervision.	I have performed this task independently.	I possess less than three (3) years of experience.	I possess three (3) to four (4) years of experience.	I possess four (4) to five (5) years of experience.	I possess more than five (5) years of experience.
1.	Fabricate and erect structural steel and manufacture other related materials									
2.	Perform nondestructive testing utilizing specific tools and equipment									
3.	Inspect various materials to ensure accordance to various standards and codes (e.g., Current American Society for Testing Materials)									
4.	Conduct and/or witness various tests on structural materials									
5.	Perform quality assurance of welded and bolted steel specimens									
6.	Perform mathematical calculations related to testing and acceptance of materials									
7.	Interpret fabrication plans and drawings to ensure constructability and weld ability									
8.	Prepare comprehensive reports pertaining to fabrication									
9.	Coordinate and work with project stakeholders vested in the fabrication process (e.g., contractors, resident engineers, suppliers)									
10.	Make recommendations for acceptance and rejection of work									

PART III - NARRATIVE QUESTIONS

INSTRUCTIONS

This exam will require candidates to respond to pre-determined job-related questions in written format. It's very important that you answer each question completely and thoroughly. YOU HAVE THE OPTION OF responding in "bullet format" or summarizing your response in "paragraph format". You may also use a combination of both.

- Your response to each question should be on a separate page.
- Each page should include the name of the examination, your name, and date.
- Responses can be in bullet or paragraph format or a combination of both.

SAMPLE

PRINT NAME:		Date:
Question #1	Bullet format sample	
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 XXXXXX 	XXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
• XXXXXX	XXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Question #2	Paragraph format samp	ole
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XXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
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Question #3	Combination of both for	mats
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• XXXXXX	XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
• XXXXXX	XXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
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XXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

PART III - NARRATIVE QUESTIONS

PRINT NAME:	Date:

Question #1

As an Associate Steel Inspector, you are required to identify all prequalified and/or code approved welding processes described in the American Welding Society welding code D1.1.

List each of the prequalified and/or code approved welding processes.

PRINT NAME:	Date:	
Question # 2		

What are the critical parameters for prequalified complete joint penetration groves welds?

PRINT NAME:	Date:

Question #3

As an Associate Steel Inspector, you are required to employ safety standards on the job.

Specify and list the minimum Personal Protective Equipment (PPE) that you should utilize in the various conditions stated below?

- Fabrication Shop
- Elevated Construction Site
- Elevated Over Water

PRINT NAME:	Date:

Question #4

As an Associate Steel Inspector, you are inspecting a Complete Penetration Groove Weld on a one inch steel material with a double bevel. The owner affiliated with this material has requested full volumetric non-destructive testing to be performed.

List the various testing methods and any respective equipment necessary to carry out this request.

PRINT NAME:	Date:

Question #5

As an Associate Steel Inspector, you are required to review Welding Procedure Specifications (WPS) from contractors. Below is a Welding Procedure Specification (WPS) for Carbon Steel with various errors.

- 1. Identify each of the sections and sub-categories on the specification that are skewed and not compliant with general American Welding Society codes.
- 2. Provide justification regarding your decisions.

WELDING PROCEDURE SPECIFICATION (WPS)
PREQUALIFIED ▼ QUALIFIED BY TESTING □
or PROCEDURE QUALIFICATION RECORDS (PQR) Yes □
AASHTO/AWS D1.5 Qualification Type 5.12.1 □ - 5.12.2 □ - 5.12.4 □

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Tar	ndem 🔲		Parallel 🔛		Position of G	iroove	CAT	_ Fillet	
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OINT DESI	GN USED						CTERISTICS		
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MS Classi	fication	FR 31	6						
Manufacture	er Trade Nar	ne Hor	WIRE		•				
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Electrode-F	lux (Class) osition	5 % AR	S Cup Size _	5/811	Max. Heat	Input	<u>(</u> Min.	Heat Input	
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Electrode-F	sition 7	Filler	S Cup Size _	WELDING PR	Max. Heat	Input	Min.	Heat Input 19	
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Electrode-F	sition 7	Filler	S Cup Size _	WELDING PR	Max. Heat	Input	Min.		
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Electrode-F Gas Compo Flow Rate Pass or Weld Layer(s)	Process	Filler Metals	Cup Size _	WELDING PR	Max. Heat	Input	Min.		
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Electrode-F Gas Compo Flow Rate Pass or Weld Layer(s)	Process	Filler Metals	Cup Size _	WELDING PR	Max. Heat	Input Travel Speed	Min.		
Electrode-F Gas Compo Flow Rate Pass or Weld Layer(s)	Process	Filler Metals	Cup Size _	WELDING PR	Max. Heat	Input Travel Speed	Min.		
Electrode-F Gas Compo Flow Rate Pass or Weld Layer(s)	Process	Filler Metals	Cup Size _	WELDING PR	Max. Heat	Input Travel Speed	Min.		
Electrode-F Gas Compo Flow Rate Pass or Weld Layer(s)	Process	Filler Metals	Cup Size _	WELDING PR	Max. Heat	Input Travel Speed	Min.		
Electrode-F Gas Compo Flow Rate Pass or Weld Layer(s)	Process	Filler Metals	Cup Size _	WELDING PR	Max. Heat	Input Travel Speed	Min.		
Electrode-F Gas Compo Flow Rate Pass or Weld Layer(s)	Process	Filler Metals	Cup Size _	WELDING PR	Max. Heat	Input Travel Speed	Min.		
Electrode-F Gas Compo Flow Rate Pass or Weld Layer(s)	Process	Filler Metals	Cup Size _	WELDING PR Current Amps or Wire Feed Speed (370 - 2.20	Max. Heat	Input Travel Speed	(Min.	oint Details	
Electrode-F Gas Compo Flow Rate Pass or Weld Layer(s)	Process	Filler Metals	Cup Size _	WELDING PR Current Amps or Wire Feed Speed (370 - 2.20	Max. Heat	Input Travel Speed	Min.		

PRINT NAME:	Date:

Question # 6

As an Associate Steel Inspector, you are required to act as a State Representative to ensure completion of work on the jobsite. You are overseeing a jobsite with an approved Welding Procedure Schedule (WPS) for a Flux-cored Arc Welding (FCAW) e71t-1 in the 3G position, however, the machine for this process is down and lane closure must be picked up by tomorrow. The welder onsite is approved and qualified for Shielded Metal Arc Welder (SMAW) E7018 3G.

List the following steps you should take in order to ensure the work is code compliant and completed prior to lanes being opened.

PRINT NAME:	Date:
Question # 7	

As an Associate Steel Inspector, you are required to carry out various protocols and procedures during a structural materials inspection.

List the various protocols and procedures.

PRINT NAME:	Date:
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Question #8

As an Associate Steel Inspector, you are required to identify various locations on a Weld Joint diagram.

Refer to the diagram below and identify each of the locations, numbered from 1-12.

